

REMARKS

Claims 1-26 are pending in the application.

Claim Rejection 35 U.S.C. § 112, paragraph two

Claims 1-26 stand rejected under 35 U.S.C. §112, paragraph two. By this paper Applicants have amended the claims thereby obviating the pending rejection. Removal of the pending rejection is respectfully requested and allowance is earnestly solicited.

Claim Rejection 35 U.S.C. § 103

35 U.S.C. § 103(a)

When applying 35 U.S.C. §103, the following tenets of patent law must be adhered to: (A) the claimed invention must be considered as a whole; (B) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) reasonable expectation of success is the standard with which obviousness is determined. *See MPEP § 2141 and Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 220 USPQ 182, 187 n.5 (Fed. Cir. 1986).

Claims 1-4, 6,7, 10, 12-14, 17-19, 21, 23, and 24, stand rejected under 35 U.S.C. §103(a) over Samela in view of Briel et al. United States Published Patent 6,119,183 (hereinafter Briel). Applicants traverse the rejection.

The current rejection under 35 U.S.C. §103(a) now attempts to correct the deficiencies in Samela with Briel. The Office's assertion is incorrect as Breil fails to correct the deficiencies in the Samela reference. As previously noted in the immediately preceding response, Samela discloses a plug for interfacing between a DB9 receptacle and a fibre channel drive connector. Samela, Col. 1, lines 57-58. Samela fails to teach or suggest a first idle regenerator being configured for receiving and transmitting signals to the first

serial master device including an idle character stream, a second idle regenerator connected to a second serial master device, the second idle regenerator being configured for receiving and transmitting signals to the second serial master device including an idle character stream, a third idle regenerator connected to the serial disk drive and the first and second idle regenerators, wherein the third idle regenerator is configured for communicating with the serial disk drive and the first and second idle regenerators. Briel does not correct these deficiencies.

In the outstanding rejection, the Office incorrectly argues that “two DB9 receptacles having input sides 50” (Samela, Col. 5, lines 30-31) teach or disclose a first idle regenerator and the second idle regenerator. This is incorrect as neither of the structures asserted to be the first or second idle regenerators functions as a regenerator configured for receiving and transmitting signals to the first serial master device including an idle character stream. Instead, the recited structures (50) are the physical pin/connector receptacles which do not teach or disclose an idle regenerator having the recited capability. In order “[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). *See also In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970). The Briel reference is not cited as correcting these deficiencies in Samela. The outstanding action also equates “a central D-shell 26” (Samela, Col. 5, line 54) with the third idle regenerator. The Office once again fails to cite how the structure “26” in Samela meets the limitations of a third idle regenerator connected to the serial disk drive and the first and second idle regenerators, wherein the third idle regenerator is configured for communicating with the serial disk drive and the first and second idle regenerators as recited in Claim 1.

The Office is correct that Samela fails to teach, disclose, or suggest the configuration of the first, second idle regenerator as recited in the claim. The Office is incorrect that Briel corrects this deficiency. First, the Office’s asserted motivation to combine is faulty as the cited portion of Briel fails to provide any suggestion for combining Briel with Samela to

obtain the present invention. Briel Col. 3, lines 4-15, the cited motivation to combine Briel with Samela, discloses “a method for selectively coupling n bus initiator devices to at least one bus target device including the steps of providing a plurality of switching circuits, each of the switching circuits being coupled between a subset of the n bus initiator devices and the bus target device.” Briel Col. 3, lines 4-9. Neither the selected portion of Briel, nor anywhere in the Briel reference is any suggestion to combine the Briel system with the adapter of Samela. Moreover, the asserted combination would not result in the present invention as Samela fails to teach or disclose a first idle regenerator, a second idle regenerator, and a third idle regenerator capable of the asserted functionality as recited in the claims. In this instance, the entire motivation to combine appears to utilize the present invention for the asserted motivation, rather than from the knowledge of one of ordinary skill in the art or the references themselves.

The Office does not identify with any specificity what structure discloses a synchronization logic capable of synchronizing data transfers between one of the first idle regenerator and the second idle regenerator, and the third idle generator, wherein the synchronization logic is connected to the first, the second and the third idle regenerators. “In proceeding before the Patent and Trademark Office, the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art...” *In re Fritch*, 972 F.2d 1260, 24 USPQ.2d 1780, 1783 (Fed. Cir. 1992). In contrast, Briel Col. 4 lines 25-52 discloses a system in which each switching circuit includes a switch control logic for providing a bi-directional port busy signal. Briel Col. 4, lines 40-45. The cited passage of Briel fails to teach a synchronization logic capable of synchronizing data transfers between one of the first idle regenerator and the second idle regenerator, and the third idle generator, instead the passage only teaches a switching circuit including a switch control logic capable of providing a busy signal. As a *prima facie* case of obviousness is not met, removal of the pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited.

Regarding Claims 6, 13, and 21, as the Office has failed to show a dual porting apparatus suitable for utilization with fibre channel based communication including a first, a second, and a third idle regenerator as well as a synchronization logic arranged and configured as in the claim. As a *prima facie* case of obviousness is not met, removal of the pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited.

Claims 7 and 14 stand rejected over Samela in view of Briel. Applicants traverse. The entirety of the rejected sole included a reference to “(see 38-52 of column 4)”. Briel Col 4, lines 38-52 is provided below. Nowhere in the cited passage is a system as recited in the claims including synchronization logic configured for providing synchronization for idle character switching disclosed or even suggested. The outstanding Action fails to provide any rational as to the Office’s basis for asserting the Briel passage teaches what is suggested by the Office. As a *prima facie* case of obviousness is not met, removal of the pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited.

particular implementation shown, bus initiator devices 12a
35 and 12b are coupled to a corresponding one of the switching
circuits 16a and 16b respectively, by means of a bus 18. In
a preferred embodiment, bus 18 may comprise a SCSI bus.

Within each of the switching circuits 16a and 16b, bus 18
is coupled to a bus initiator interface 20 as shown. Data lines
40 22 and control lines 24 couple the bus initiator interface 20
to a corresponding bus target interface 26 as well as pro-
viding data and control signal connections to the switch
control logic 28. Switch control logic 28 provides a
bi-directional port busy signal on port busy signal line 30 to
45 any other switching circuits 16 as well as an enable signal on
enable signal line 32 to its own bus target interface 26. A bus
34 connects the bus target interfaces 26 of the switching
circuits 16a and 16b to the bus target device 14, which may
in a preferred embodiment comprise a single-ported com-
50 puter mass storage device, for example a disk drive, or other
computer peripheral device supported by the various SCSI
bus standards.

With reference additionally now to FIG. 2, a single one of
the switching circuits 16 above described with respect to
55 FIG. 1 is shown in more detail. The single switching circuit

Briel Col 4, lines 38-52

Claims 10 and 23 stand rejected under 35 U.S.C. §103(a) over Samela in view of Briel. Applicants traverse. As the Office has merely recited the rejection of Claim 1 with respect to the first idle regenerator, the second idle regenerator, the third idle regenerator and the synchronization logic, Applicants respectfully re-forward their arguments as discussed

with respect to Claim 1, as applicable to the instant claims. In general, the Office has failed to show how the receptacle plugs of Samela (items 50 left and right) anticipate the first and second idle regenerators. Moreover, the Office has failed to show how the receptacle plugs (50) are capable of functioning a regenerator configured for receiving and transmitting signals to the first serial master device including an idle character stream (in the case of Claim 10). Additionally, the Office has failed to provide motivation for combining Briel with Samela to achieve the present invention. The portion of Briel reference asserted to provide motivation to combine only discloses “a method for selectively coupling n bus initiator devices to at least one bus target device including the steps of providing a plurality of switching circuits, each of the switching circuits being coupled between a subset of the n bus initiator devices and the bus target device.” Briel Col. 3, lines 4-9. As the Federal Circuit has held, “[i]t is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.” *In re Lahu*, 747 F.2d 703, 223 USPQ 1257, 1258 (Fed. Cir. 1984). This the cited passage of Briel does not do.

Further, even if the motivation to combine Samela with Briel existed, the asserted combination fails to teach the present invention as Briel fails to teach a synchronization logic as recited in the claims. Instead, Briel Col. 4 discloses a switching circuit including a switch control logic which is only capable of providing a port busy signal. The switch control logic of Briel fails to anticipate a synchronization logic as recited in the claims. Briel does not teach an auto controller. The Office cited items 16a and 16b in Briel as being the “auto detector”. This is incorrect as items 16a and 16b are the switching circuits (Briel, Col. 4, line 36) and include the asserted idle regenerators, or item 20 “differential interface” of Briel. See FIG. 1. The Office also fails to indicate what structure is the asserted third idle regenerator as no item is referenced in the outstanding action as being connected to the serial disk drive and the first and second idle regenerators (asserted to be items 20) of FIG. 1. As a *prima facie* case of obviousness is not met, removal of the

pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited.

Regarding Claims 5, 11, and 20, Applicants traverse the pending rejection under 35 U.S.C. §103(a). The Examiner's assertion of Applicant Admitted Prior Art (AAPA) is faulty. While paragraph [0003] does note (1) serial advanced technology attachment (SATA) disk drives exist and (2) SATA drives are inexpensive, the Examiner is incorrect that this provides the motivation for combining Briel with Samela and then looking for cheap drives. Nowhere does paragraph [0003] of the present invention suggest that this "Briel/Samela combination" is known. In fact, until the present invention no one had ever suggested this solution was possible. Obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Thus, the Examiner may not use the patent application as a basis for the motivation to combine or modify the prior art to arrive at the claimed invention. Until this invention, SATA drives are unsuitable in situations requiring fault tolerance, thus all the cost savings is immaterial as a less expensive drive fails to have any meaning when the system requires the fault tolerance offered by a dual ported device. The Office's rationale is merely a "red herring" which attempts to have us ignore the failure of the Office to obtain a reference which provides a motivation to combine Samela with Briel with the knowledge that SATA drives exist. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992)

quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988). As a *prima facie* case of obviousness is not met, removal of the pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited.

Regarding claims 8, 15, 22, and 25, the Applicants traverse the pending rejection under 35 U.S.C. §103(a). The Office has failed to prove a *prima facie* case of obviousness as “Newton’s Telecom Dictionary” is not a reference to the present application. The presently claimed invention has an effective date of December 19, 2001. While “Newton’s Telecom Dictionary” is dated 2002 (see Page 1 of 1 of Form PTO-892 of the instant Action). Thus, “Newton’s Telecom Dictionary” is not a reference and the asserted combination fails. “Before answering Graham’s ‘content’ inquiry, it must be known whether a patent or publication is in the prior art under 35 U.S.C. §102.” *M.P.E.P. §2141.01 citing Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568, 1 U.S.P.Q.2d 1593, 1597 (Fed. Cir.), cert. denied, 481 U.S. 1052 (1987). As a *prima facie* case of obviousness is not met, removal of the pending rejection under 35 U.S.C. §103(a) is requested and allowance is earnestly solicited. Applicants will not burden the record further.

Claims 9, 16, and 26 stand rejected under 35 U.S.C. §103(a) over Samela in view of Briel, in further view of Shikano United States Patent 5,689,401 (hereinafter Shikano). Applicants traverse the rejection. Applicants respectfully forward their arguments with respect to the independent claims as applicable to the instant claims. Namely, neither Briel nor Shikano correct the deficiencies noted in Samela including the lack of a first idle regenerator, a second idle regenerator, a third idle regenerator, as well as the failure of Briel to teach a synchronization logic, and auto detector and to correct the foregoing deficiencies in Samela. Moreover, the Office’s motivation to make the Samela/Briel/Shikano is defective as the Shikano passage recites the goal of preventing damage to printed circuit boards. Shikano, Col. 2, lines 62-65. Neither Samela nor Briel fit with this goal as Samela is another connector (thus being as rugged as the Shikano

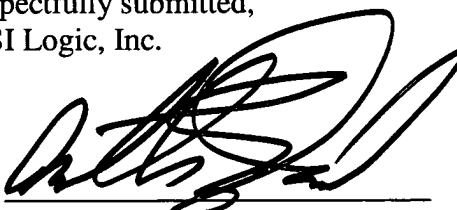
apparatus) and Briel is a multi-port switching system which would, ultimately, terminating with a bus connector being sufficiently rugged to withstand multiple connections and disconnections thereby, not requiring the asserted damage mitigation as suggested by the Office. Applicants respectfully re-forward their arguments as applicable from the independent claims.

CONCLUSION

In light of the forgoing, reconsideration and allowance of the claims is earnestly solicited.

DATED: January 3, 2006.

Respectfully submitted,
LSI Logic, Inc.

By 
Nathan T. Grebasch
Reg. No: 48,600

SUITER · WEST · SWANTZ PC LLO
14301 FNB Parkway, Suite 220
Omaha, NE 68154-5299
Telephone: (402) 496-0300
Facsimile: (402) 496-0333